

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) An isolated polypeptide having disintegrin activity and comprising amino acids 389 through 491 of SEQ ID NO:12.
2. (currently amended) The isolated polypeptide of claim 1 wherein the polypeptide comprises an amino acid sequence ~~selected from the group consisting of SEQ ID NO:12, SEQ ID NO:13, and SEQ ID NO:14.~~
3. (currently amended) The isolated polypeptide of claim 1 further comprising an amino acid sequence selected from the group consisting of amino acids 1 through 15 of SEQ ID NO:12, amino acids 16 through 188 of SEQ ID NO:12, amino acids 189 through 388 of SEQ ID NO:12, amino acids 492 through 675 of SEQ ID NO:12, amino acids 676 through 698 of SEQ ID NO:12, and amino acids 699 through 766 of SEQ ID NO:12, ~~amino acids 699 through 787 of SEQ ID NO:13, and amino acids 699 through 820 of SEQ ID NO:14.~~
4. (original) The isolated polypeptide of claim 1 further comprising the amino acid sequence of a polypeptide selected from the group consisting of a poly-His peptide, a FLAG peptide, a peptide linker, a leucine zipper domain, and an Fc polypeptide.
5. (original) The isolated polypeptide of claim 1 in non-glycosylated form.
6. (currently amended) An isolated polypeptide having disintegrin activity encoded by a nucleic acid molecule selected from the group consisting of:
 - (a) an isolated nucleic acid molecule comprising a DNA sequence ~~selected from the group consisting of SEQ ID NO:7, SEQ ID NO:8, and SEQ ID NO:9;~~
 - (b) an isolated nucleic acid molecule encoding an amino acid sequence comprising the sequence ~~selected from the group consisting of amino acids 389 through 491 of SEQ ID NO:12, SEQ ID NO:12, SEQ ID NO:13, and SEQ ID NO:14;~~
 - (c) an isolated nucleic acid molecule that encodes a polypeptide having disintegrin activity and that hybridizes to either strand of a denatured, double-stranded DNA

comprising a nucleic acid sequence of (a) under hybridization conditions of 50% formamide and 6XSSC, at 42°C with washing conditions of 68°C, 0.2X SSC, 0.1% SDS; and

(d) an isolated nucleic acid molecule degenerate from SEQ ID NO:7, ~~SEQ ID NO:8, and SEQ ID NO:9~~ as a result of the genetic code.

7. (currently amended) The isolated polypeptide of claim 6 having a molecular weight ~~selected from the group consisting of approximately 86,983; 89,459; and 92,781 Daltons~~ as determined by SDS-PAGE.

8. (original) The isolated polypeptide of claim 6 in non-glycosylated form.

9. (original) The isolated polypeptide of claim 6, wherein the polypeptide comprises amino acids 389 through 491 of SEQ ID NO:12.

10. (currently amended) The isolated polypeptide of claim 9 further comprising an amino acid sequence selected from the group consisting of amino acids 1 through 15 of SEQ ID NO:12, amino acids 16 through 188 of SEQ ID NO:12, amino acids 189 through 388 of SEQ ID NO:12, amino acids 492 through 675 of SEQ ID NO:12, amino acids 676 through 698 of SEQ ID NO:12, and amino acids 699 through 766 of SEQ ID NO:12, ~~amino acids 699 through 787 of SEQ ID NO:13, and amino acids 699 through 820 of SEQ ID NO:14.~~

11. (original) The isolated polypeptide of claim 6, wherein the polypeptide comprises SEQ ID NO:12.

12. (withdrawn) The polypeptide of claim 6, wherein the polypeptide comprises SEQ ID NO:13.

13. (withdrawn) The polypeptide of claim 6, wherein the polypeptide comprises SEQ ID NO:14.

14. (original) The isolated polypeptide of claim 6 further comprising the amino acid sequence of a polypeptide selected from the group consisting of a poly-His peptide, a FLAG peptide, a peptide linker, a leucine zipper domain, and an Fc polypeptide.

15. (currently amended) A polypeptide having disintegrin activity and encoded by a recombinant nucleic acid, wherein the polypeptide is expressed by a method comprising culturing a host cell comprising said recombinant nucleic acid under conditions promoting expression of the polypeptide, and wherein said recombinant nucleic acid comprises a nucleotide sequence encoding the polypeptide and selected from the group consisting of:

- (a) SEQ ID NO:7, ~~SEQ ID NO:8, and SEQ ID NO:9;~~
- (b) a nucleotide sequence encoding an amino acid sequence comprising ~~a sequence selected from the group consisting of~~ amino acids 389 through 491 of SEQ ID NO:12, ~~SEQ ID NO:12, SEQ ID NO:13, and SEQ ID NO:14;~~
- (c) a nucleotide sequence that encodes a polypeptide having disintegrin activity and that hybridizes to either strand of a denatured, double-stranded DNA comprising a nucleotide sequence of (a) under hybridization conditions of 50% formamide and 6XSSC, at 42°C with washing conditions of 68°C, 0.2X SSC, 0.1% SDS; and
- (d) a nucleotide sequence degenerate from SEQ ID NO:7, ~~SEQ ID NO:8, and SEQ ID NO:9~~ as a result of the genetic code.

16. (original) The polypeptide of claim 15, wherein the polypeptide is expressed by a method further comprising purifying the expressed polypeptide.

17. (original) The polypeptide of claim 15, wherein the polypeptide is expressed by a method comprising culturing a host cell selected from the group consisting of bacterial cells, yeast cells, plant cells, and animal cells.

18. (original) The polypeptide of claim 15, wherein the polypeptide is expressed by a method comprising culturing a mammalian host cell.

19. (currently amended) The polypeptide of claim 15 having a molecular weight ~~selected from the group consisting of~~ approximately 86,983; ~~89,459; and 92,781~~ Daltons as determined by SDS-PAGE.

20. (original) The polypeptide of claim 15 in non-glycosylated form.

21. (original) The polypeptide of claim 15, wherein the polypeptide comprises amino acids 389 through 491 of SEQ ID NO:12.

22. (currently amended) The polypeptide of claim 21 further comprising an amino acid sequence selected from the group consisting of amino acids 1 through 15 of SEQ ID NO:12, amino acids 16 through 188 of SEQ ID NO:12, amino acids 189 through 388 of SEQ ID NO:12, amino acids 492 through 675 of SEQ ID NO:12, amino acids 676 through 698 of SEQ ID NO:12, and amino acids 699 through 766 of SEQ ID NO:12, ~~amino acids 699 through 787 of SEQ ID NO:13, and amino acids 699 through 820 of SEQ ID NO:14.~~

23. (original) The polypeptide of claim 15, wherein the polypeptide comprises SEQ ID NO:12.

24. (withdrawn) The polypeptide of claim 15, wherein the polypeptide comprises SEQ ID NO:13.

25. (withdrawn) The polypeptide of claim 15, wherein the polypeptide comprises SEQ ID NO:14.

26. (original) The polypeptide of claim 15 further comprising the amino acid sequence of a polypeptide selected from the group consisting of a poly-His peptide, a FLAG peptide, a peptide linker, a leucine zipper domain, and an Fc polypeptide.

Claims 27-31 (cancelled).